



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2022-0397; Project Identifier MCAI-2021-01354-A]

RIN 2120-AA64

Airworthiness Directives; Piaggio Aero Industries S.p.A Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to adopt a new airworthiness directive (AD) for certain Piaggio Aero Industries S.p.A. (Piaggio) Model P-180 airplanes. This proposed AD results from mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI identifies the unsafe condition as altimetry system errors in the air data computers (ADCs) and stand-by instrument systems. This proposed AD would require amending the existing airplane flight manual (AFM), installing improved ADCs and a detachable configuration module (DCM), and revising the existing instructions for continued airworthiness. The FAA is proposing this AD to address the unsafe condition on these products.

DATES: The FAA must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <https://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: (202) 493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12 140, 1200 New Jersey Avenue SE, Washington, DC 20590.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this NPRM, contact Piaggio Aero Industries S.p.A., Dominico Noceti, Pionieri e Aviatori d'Italia snc, Genoa, 16154, Italy; phone: +39 335 810 59 20; email: DNoceti@piaggioaviation.it; website: <https://www.technicalsupport@piaggioaerospace.it>. You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, MO 64106. For information on the availability of this material at the FAA, call (817) 222-5110.

Examining the AD Docket

You may examine the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2022-0397; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this NPRM, the MCAI, any comments received, and other information. The street address for Docket Operations is listed above.

FOR FURTHER INFORMATION CONTACT: Mike Kiesov, Aviation Safety Engineer, General Aviation & Rotorcraft Section, International Validation Branch, FAA, 901 Locust, Room 301, Kansas City, MO 64106; phone: (816) 329-4144; email: mike.kiesov@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

The FAA invites you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2022-0397; Project Identifier MCAI-2021-01354-A” at the beginning of your comments. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend this NPRM because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to <https://www.regulations.gov>, including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this NPRM.

Confidential Business Information

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this NPRM contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this NPRM, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as “PROPIN.” The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this AD. Submissions containing CBI should be sent to Mike Kiesov, Aviation Safety Engineer, General Aviation & Rotorcraft Section, International Validation Branch, FAA, 901 Locust, Room 301, Kansas City, MO 64106. Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

Background

The European Union Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2019-0269, dated October 29, 2019 (referred to after this as “the MCAI”), to address the unsafe condition on Piaggio Model P.180 Avanti II airplanes. The MCAI states:

During monitoring of P.180 Avanti II fleet by EUROCONTROL (checks performed by Air Traffic Control stations) a mean altimetry system error and some singular measurement exceedances were reported being outside of limits defined by rules applicable to Reduced Vertical Separation Minimum (RVSM) airworthiness standards. Subsequent investigation determined that the static source error correction curves embedded in the ADC of pilot and co-pilot, as well as in the stand-by instrument system, did not ensure the required RVSM performance of the aeroplane.

This condition, if not corrected, could lead to delivery [of] erroneous air data information and consequent impairment of aeroplane altitude-keeping capability, possibly resulting in a mid-air collision within RVSM airspace.

To address this potential unsafe condition, Piaggio issued the AFM TC [Temporary Change No. 107] introducing additional limitations for operation within RVSM airspace and issued the SB [Piaggio Aerospace Service Bulletin 80-0467] providing instructions to modify the aeroplane.

For the reasons described above, this [EASA] AD requires amendment of the AFM and modification of the aeroplane by installing improved ADCs and DCM.

You may examine the MCAI in the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2022-0397.

Related Service Information under 1 CFR Part 51

The FAA reviewed Piaggio Aero Industries S.p.A. A.S. Service Bulletin No. 80-0467, Revision 2, dated March 6, 2020, which specifies procedures for replacing the two ADCs and the DCM with improved parts.

The FAA also reviewed Piaggio Aviation P.180 Avanti II/EVO Temporary Change No. 107, dated September 17, 2019, which updates the limitations section of the AFM by prohibiting operations in RVSM airspace if the ADCs and DCM have not been replaced.

In addition, the FAA reviewed Piaggio Aviation P.180 Avanti EVO Maintenance Manual Temporary Revision No. 126, dated June 6, 2019, which updates and adds certain tasks for the navigation system.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

FAA's Determination

This product has been approved by the aviation authority of another country and is approved for operation in the United States. Pursuant to the FAA's bilateral agreement with this State of Design Authority, it has notified the FAA of the unsafe condition described in the MCAI and service information referenced above. The FAA is issuing

this NPRM after determining the unsafe condition described previously is likely to exist or develop on other products of the same type design.

Proposed AD Requirements in this NPRM

This proposed AD would require accomplishing the actions specified in the service information already described.

Differences Between this Proposed AD and the MCAI

The MCAI requires informing all flight crews of the AFM revision and operating accordingly thereafter, and this proposed AD would not because those actions are already required by FAA operating regulations.

Costs of Compliance

The FAA estimates that this AD, if adopted as proposed, would affect 101 airplanes of U.S. registry.

The FAA estimates the following costs to comply with this proposed AD:

Estimated costs

Action	Labor Cost	Parts Cost	Cost per airplane	Cost on U.S. operators
Revise AFM	1 work-hour x \$85 per hour = \$85	Not Applicable	\$85	\$8,585
Update Maintenance Manual	1 work-hour x \$85 per hour = \$85	Not Applicable	\$85	\$8,585
Replace two ADCs and one DCM	16 work-hours x \$85 per hour = \$1,360	\$21,900	\$23,260	\$2,349,260

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by

prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

The FAA determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Would not be a “significant regulatory action” under Executive Order 12866,
- (2) Would not affect intrastate aviation in Alaska, and
- (3) Would not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

- 2. The FAA amends § 39.13 by adding the following new airworthiness directive:

Piaggio Aero Industries S.p.A.: Docket No. FAA-2022-0397; Project Identifier MCAI-2021-01354-A.

(a) Comments Due Date

The FAA must receive comments on this airworthiness directive (AD) by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Piaggio Aero Industries S.p.A. Model P-180 airplanes, serial number (S/N) 1002 and S/Ns 1105 through 3010 inclusive, certificated in any category.

(d) Subject

Joint Aircraft System Component (JASC) Code 3417, Air Data Computer.

(e) Unsafe Condition

This AD was prompted by mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI identifies the unsafe condition as altimetry system errors in the air data computers (ADCs) and stand-by instrument systems. The FAA is issuing this AD to prevent a mean altimetry system error measurement from exceeding the limits defined for operations within airspace designed as reduced vertical separation minimum (RVSM) airspace. The unsafe condition, if not addressed, could result in a potential mid-air collision within RVSM airspace.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Required Actions

(1) Within 24 months after the effective date of this AD, revise the Limitations section of the existing airplane flight manual (AFM) for your airplane by adding the information in Piaggio Aviation P.180 Avanti II/EVO Temporary Change No. 107, dated September 17, 2019. Using a different document with language identical to that on page 2-33-bis or 2-33.C-bis (as applicable to the S/N of your airplane) of Piaggio Aviation P.180 Avanti II/EVO Temporary Change No. 107, dated September 17, 2019, is acceptable for compliance with this requirement.

(2) Within 660 hours time-in-service after the effective date of this AD or 24 months after the effective date of this AD, whichever occurs first, modify the airplane by replacing the ADCs and detachable configuration module (DCM) in accordance with the Accomplishment Instructions, paragraphs (5) through (14), of Piaggio Aero Industries S.p.A. A.S. Service Bulletin No. 80-0467, Revision 2, dated March 6, 2020, and revise the instructions for continued airworthiness for your airplane by incorporating the information in Piaggio Aviation P.180 Avanti EVO Maintenance Manual Temporary Revision No. 126, dated June 6, 2019.

(3) The AFM revision required by paragraph (g)(1) of this AD, if included, may be removed after completing the actions required by paragraph (g)(2) of this AD.

(4) As of the effective date of this AD, do not install on any airplane an ADC part number (P/N) 822-1109-018, DCM P/N 501-1870-31, or DCM P/N 501-1870-51.

(h) Alternative Methods of Compliance (AMOCs)

(1) The Manager, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (i)(1) of this AD and email to: 9-AVS-AIR-730-AMOC@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(i) Related Information

(1) For more information about this AD, contact Mike Kiesov, Aviation Safety Engineer, General Aviation & Rotorcraft Section, International Validation Branch, FAA, 901 Locust, Room 301, Kansas City, MO 64106; phone: (816) 329-4144; email: mike.kiesov@faa.gov.

(2) Refer to MCAI European Union Aviation Safety Agency (EASA) AD 2019-0269, dated October 29, 2019, for related information. You may examine the EASA AD

at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2022-0397.

(3) For service information identified in this AD, contact Piaggio Aero Industries S.p.A., Dominico Noceti, Pionieri e Aviatori d'Italia snc, Genoa, 16154, Italy; phone: +39 335 810 59 20; email: DNoceti@piaggioaviation.it; website: <https://www.technicalsupport@piaggioaerospace.it>. You may review this referenced service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, MO 64106. For information on the availability of this material at the FAA, call (817) 222-5110.

Issued on April 4, 2022.

Lance T. Gant, Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.

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